

# Energy Commission Activities Surrounding Distributed Generation

*Siting Committee DG Strategic Planning Workshop  
Sacramento, CA*



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California Energy Commission  
February 5, 2002

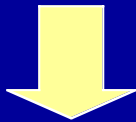
# Energy Commission and its Functions

- Energy policy and information advisor to the California governor and legislature.
- Major Functions:
  - License power plants.
  - Promote energy efficiency and conservation.
  - Advance energy technologies.
  - Assess current and future energy trends.



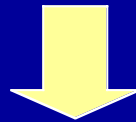
# DG Activities at the Energy Commission

## Information Role



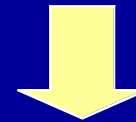
CADER Involvement  
DG Web Page  
Consumer Education  
Outreach

## Regulatory Role



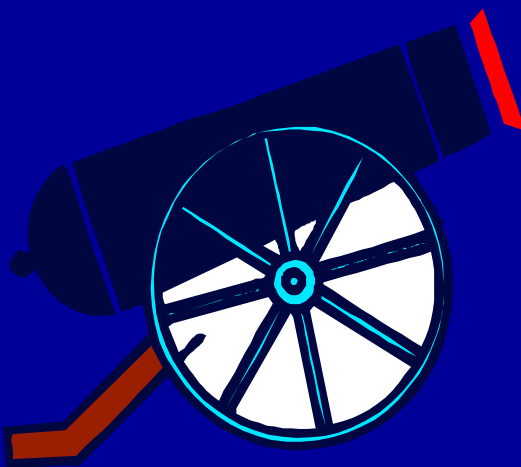
Collaboration with CPUC  
Interconnection Rules  
Permit Streamlining  
Policy Analysis

## Funding Role



PIER  
Renewable Programs  
Energy Efficiency Financing

# *Funding at the Energy Commission*



## *PIER DER Goals and Funding*

- DER that is clean, efficient, and cost effective.
- Safe, reliable, & effective integration of DER into the distribution system.
- Optimize DER to provide maximum system-wide benefits (reliability, power quality, security, etc.)



PROJECT TYPE	PROJECTS	PIER FUNDING (Millions \$)
Generation	34	\$28.3
System Effects	10	\$6.5
Market Integration	10	\$5.0
<b>TOTAL</b>	<b>54</b>	<b>\$39.8</b>



# Generation Programs Currently Available

## Renewables Buydown Program (March 1998)

- Incentive apply to PVs, small wind turbines, renewable fuel cells, and solar thermal electric.
- \$100 million allocated to program through 2001.
  - \$20 million remaining for systems < 10 kW
- \$20.25 million annual allocation through 2006.
  - 60% to small systems (30 kw or less).
  - 40% to large systems (more than 30 kw).

## Solar & DG Grant Program (January 2001)

- Incentive applies to microturbines, fuel cells, and reciprocating engines.
  - Must operate in parallel with grid.
  - High emissions and reliability required.
- \$2 million allocated to program since inception.



# *Renewables Program Results to Date*

## **Renewables Buydown Program**

- Energy Commission has funded more than \$25 million in renewable DG.
- 2,000 systems (7 MW) installed to date.
  - 1,300 systems (5 MW) installed in 2001.
- More than 1,000 systems (10 MW) currently in review.



## **Solar and DG Grant Program**

- No DG projects awarded grants.
- Emissions/reliability requirements appear to be too stringent for eligible DG projects.



# Energy Efficiency Financing Program

## Who is eligible for loans?

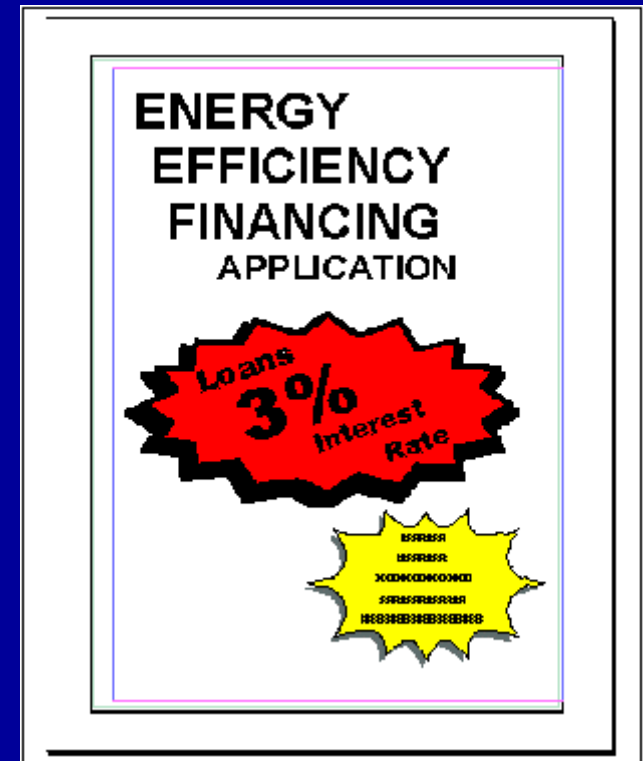
Schools, hospitals, cities, counties, special districts, public care institutions.

## What can be financed?

- Energy efficient equipment with proven energy savings, including distributed generation.
- Loans must be repaid from energy savings within 11 years.

## How much is available?

- \$10 million available at 3% interest
- Up to \$2 million per loan.



# *DG Regulatory Activity at the Energy Commission*

- Collaboration with CPUC on DG issues since early 1999.
- Has produced standardized Rule 21 and self-generation incentive program.
  - Rule 21 working group continue with close coordination between agencies.
  - Energy Commission participates as a member of the self-generation program development team.
- Ensures consistency with Energy Commission Renewables program.

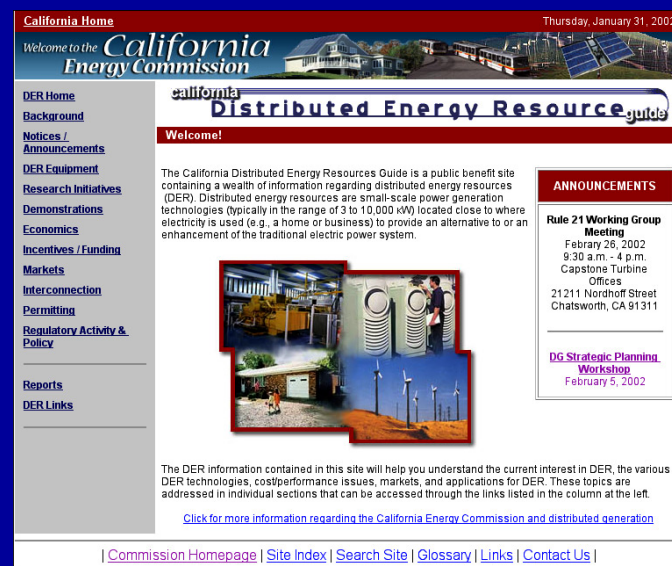


California Public Utilities Commission



# DG Information Role

- Web site is central point of reference for DG issues in California.
- Role as leader in DG R&D provides an opportunity to disseminate key research results to the industry.
- Outreach efforts to reduce customer frustration, assist local agencies, and promote standardization of DG equipment.

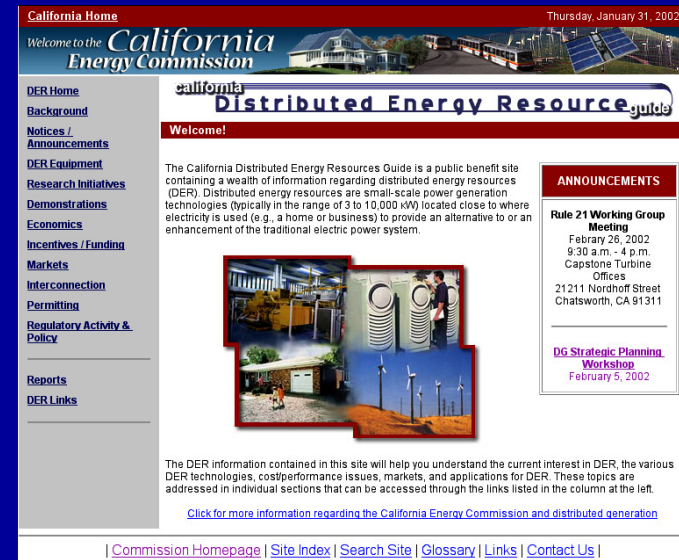


# For Up to Date Info, Check Out These Web Sites



**consumer energy center**

[www.consumerenergycenter.org](http://www.consumerenergycenter.org)



[www.energy.ca.gov/distgen](http://www.energy.ca.gov/distgen)

[www.energy.ca.gov/  
efficiency/publicsectorjump.html](http://www.energy.ca.gov/efficiency/publicsectorjump.html)

